



## U.S. Fish & Wildlife Service

## FY 2006 Alpena FRO Accomplishment Summary

## Partnerships and Accountability

Partnerships are essential for effective fisheries conservation. Many agencies, organizations, and private individuals are involved in fisheries conservation and management, but no one can do it alone. Together, these stakeholders combine efforts and expertise to tackle challenges facing fisheries conservation. The success of these partnerships will depend on strong, two-way communications and accountability. The Alpena Fishery Resources Office in Alpena, Michigan provides fishery conservation in cooperation with many partners. The accomplishments listed below provide examples of some of the partnerships that were established to meet fishery and habitat related goals in Fiscal Year 2006 (October 2005-September 2006).

# Service Honored With "Outstanding Agency Partner" Award



Submitted by Heather Rawlings Fish and Wildlife Biologist

Biologists Heather Rawlings and Stewart Cogswell (Green Bay FRO), and Project Leader Craig Czarnecki (East Lansing FO) were honored on October 7, 2005 to receive the "Outstanding Agency Partner" award from the Conservation Resource Alliance (CRA). CRA is a non-profit Resource, Conservation & Development office located in Traverse City, MI. CRA works in the NW Lower Peninsula of Michigan to improve the natural resources of the area through the creation of partnerships to actively restore habitat and educate the

general public and local policy-makers. The Service has funded CRA's projects through the Partners for Fish and Wildlife, Fish Habitat Restoration, Coastal and Fish Passage Program's. The Service greatly appreciates our partnership with CRA, and will continue to work with CRA to restore riverine, riparian, and upland habitats for the betterment of our natural resources in NW Michigan. Native brook trout are the dominate fish in these coldwater ecosystems, and are the fish that will benefit from this in-stream and riparian work.



Completion of aquatic habitat restoration projects contribute toward the "Aquatic Habitat Conservation and Management" and "Partnerships and Accountability" components of the Service Fisheries Program Vision for the Future.

#### Listed Species Found on Refuge Lands in Western Lake Erie



Submitted by James Boase Fishery Biologist

As part of the Service's Challenge Cost Share Grant Program (CCS) biologists from Alpena FRO and Michigan DNR Lake Erie Management Unit teamed up to conduct the first fishery survey within the recently established Detroit River International Wildlife Refuge (Refuge). The Refuge boundary includes Michigan waters of the Lower Detroit River and Lake Erie. The last time a fishery survey was

conducted in that area of the Great Lakes was back in the early 1980's. Since that time many changes have taken place, specifically the addition of exotic species that have likely displaced or reduced the numbers and diversity of native species.

Our goal with this pilot project was to provide baseline information about what species, both native and exotic, are found within the Refuge. The Refuge provides some of the last remaining natural wetland areas available in the Detroit River and Western Lake Erie. Those nursery areas are critical to the early life stages of many species of sport fish as well as some state listed species. Historical records from past surveys had identified over thirty species of fish using those wetland habitats for either spawning or nursery areas.

During the early planning stages (February 2005) members from Michigan DNR (Gary Towns, Joe Robison, and Jim Francis) and the Service (John Hartig and Jim Boase) identified eight areas located along the western shoreline of Lake Erie that still had relatively large expanses of intact soft shorelines and were identified as important for fish and wildlife. Unfortunately only five areas could be sampled in 2005 but plans are to finish the remaining three areas in Lake Erie and then add additional locations located in the Detroit River in 2006.

Historical records indicated that the near-shore areas within the boundaries of the Refuge historically provided spawning and nursery habitat for over thirty species of native fish in the Great Lakes. During the week of September 12, 2005 using both electro-fishing and seining a total of 46 different fish species were collected in the near-shore habitats of Lake Erie. More importantly, young-of-the-year age groups of the major sport fish species like walleye, large mouth bass, small mouth bass, northern pike, and other sunfishes were collected. One state listed species, the silver chub was collect as well. This effort is a critical first step in identifying



the current status of fish species within the newly created Detroit River International Wildlife Refuge and will aid the refuge with establishing its Comprehensive Conservation Plan. This effort provided a unique opportunity to create new partnerships with both governmental and non-governmental agencies to achieve common Great Lakes management objectives. Maintaining these collaborative relationships allows for the most efficient use of limited human and fiscal resources. This project is consistent with the "Partnerships and Accountability", "Aquatic Species Conservation and Management", and "Leadership in Science and Technology" focus areas of the Fisheries Program Vision for the Future.

## Service and Ontario Ministry of Natural Resources Biologists Collaborate on Lake Trout Broodstock Development



Submitted by James Boase Fishery Biologist

Fishery Biologist James Boase traveled to Parry Sound, Ontario on October 16, 2005 to assist Ontario Ministry of Natural Resources (OMNR) biologists with a fall lake trout spawning survey and gamete collection effort. This was the first of a three-year project leading to the development of a Parry Sound strain broodstock for use in U.S. waters of Lake Huron. Although the broodstock development effort was the principal focus of the project, additional

objectives included:

- 1. Replenishment of the Parry Sound brood stock used in the OMNR hatchery program
- 2. Determine current thiamine levels in Parry Sound lake trout to continue monitoring efforts addressing lakewide Early Mortality Syndrome (EMS) research
- 3. Complete the disease screening of this free ranging Lake Huron lake trout stock to assist in clearing them for exportation to the U.S. and for addition to the OMNR hatchery system

Parry Sound strain lake trout are one of two remnant Lake Huron stocks and are recommended for expanded use in the lakewide rehabilitation plan. Lake trout in this region of Georgian Bay are considered rehabilitated and stocking was discontinued as the proportion of wild lake trout reached target levels. Age and growth data collected during this effort will aid in the continued monitoring of lake trout stocks in this region of the lake.



The target was to collect 50 wild lake trout families (one male and one female) and transfer those pairs back to a quarantine facility in Chatsworth, Ontario where they will be held until they are cleared for certifiable diseases. Plans were to collect gametes over the three week spawning period and over a wide geographic region of Parry Sound to enhance the genetic contribution. Boase assisted on the project October 16-22 and was followed by John Johnston from the Jordan River NFH who assisted October 23-29. Fish collection started out slow due to the abnormally warm fall weather but by weeks two and three, the capture of lake trout increased significantly and 68 pairs were ultimately collected. Trap nets were fished from the shoreline out into 3 - 6 meters of water at six locations within Parry Sound.

This collaborative effort provided an excellent opportunity to interact with biologists from the Ontario Ministry of Natural Resources and to explain the Service's mission and efforts to manage fishery resources in the Great Lakes. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native lake trout populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This effort supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

### St. Marys River Lake Sturgeon Project Funded

Submitted by Scott Koproski Fishery Biologist

During the month of November 2005, Fishery Biologist Scott Koproski received notification from the National Fish and Wildlife Foundation that his proposal was selected for funding. The project titled *Lake Sturgeon Tracking Study in the St. Marys River* is scheduled to take place during the 2006 field season. Partners on this project are Lake Superior State University, Bay Mills Indian Community, and the Soo Area Sportsman.

The intent of this project was to capture lake sturgeon in the St. Marys River using baited setlines. Lake Superior State University has been successful in recent years capturing lake sturgeon in this system using this technique. Once a fish is captured, biological data will be collected from each fish and fish that are designated by researchers as adults will have a sonic telemetry tag surgically implanted for tracking purposes. Upon relocating fish using the sonic telemetry gear, an underwater camera will be deployed for habitat characterization. Since very little is known about the lake sturgeon population that utilizes the St. Marys River, we hope to obtain a variety of information including: age/length/weight relationships, movement tendencies, spawning/feeding habitats, and population estimates.

Once the National Fish and Wildlife Foundation notified Biologist Koproski that he was successful in securing funding, he began working on the Budget and Phasing Document. This document was required by the Foundation prior to funds being released. The purpose of this document was to identify where funds will be spend and allow the Foundation to track monies released for this project.



This project is an example of Alpena FRO's commitment to the following Fisheries Program Vision for the Future priorities: "Partnerships and Accountability" and "Aquatic Species Conservation and Management".

## Lake Sturgeon Research Presented to Frankenmuth Conservation Club



Submitted by James Boase Fishery Biologist

Fishery Biologist James Boase traveled to Frankenmuth, Michigan on November 7, 2005 to attend the Frankenmuth Conservation Club monthly meeting. Boase gave a PowerPoint presentation describing the ongoing lake sturgeon rehabilitation program taking place in the Saginaw River Watershed. Approximately 250 members were in attendance at the

meeting and stayed for the presentation.

The informal presentation allowed the audience to participate throughout the talk by asking questions and sharing their encounters with lake sturgeon while fishing in the Saginaw River and Saginaw Bay. Questions focused on how lake sturgeon habitat rehabilitation would enhance the abundance of other species, interaction with exotic species, and health risks associated with the consumption of lake sturgeon. The forum was an excellent opportunity to explain how the Alpena FRO is working with other biologists, recreational anglers, and commercial fishers from both Canada and the US in efforts to better understand and enhance sturgeon populations throughout the Great lakes. In addition, the meeting provided an opportunity to interact with recreational anglers from mid-Michigan and explain the vital role they play in the rehabilitation of lake sturgeon.

The Frankenmuth Conservation Club is Michigan's oldest conservation club and has over 1,800 members. The club manages property adjacent to the Cass River where lake sturgeon research has been taking place since the spring of 2005. This is the second opportunity Alpena FRO staff have had to present at this club and has resulted in better communication between the two groups. Results of the improved communication have already paid off. During the 2005 spring sampling period, when lake sturgeon migrate into rivers to spawn, a lake sturgeon was spotted by a club member near a suspected spawning area within the Saginaw watershed. The member notified biologists from Alpena who then went to the location and officially documented lake sturgeon use of the system.



This presentation provided an excellent opportunity to explain to the public the Service's mission and efforts to restore native fish and control exotic species. Specifically, the presentation focused on efforts to rehabilitate lake sturgeon populations in tributaries connecting to Lake Huron. The benefits of native species restoration and the detriments of exotic species were clearly defined and explained. This project is consistent with the "Partnerships and Accountability", "Aquatic Species Conservation and Management", and "Leadership in Science and Technology" focus areas of the Fisheries Program Vision for the Future.

# Lake Sturgeon Research Presented at the Saginaw Field and Stream Club



Submitted by James Boase Fishery Biologist

Fishery Biologist James Boase traveled to Saginaw, Michigan on November 10, 2005 to attend the Saginaw Field and Stream Club monthly meeting. Boase gave a PowerPoint presentation titled "Lake Sturgeon Recovery Efforts in the Saginaw River Watershed". The 30 minute presentation was attended by approximately 100 club members. Two main focal points were presented; current

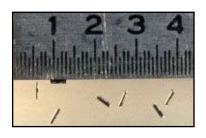
efforts to identify lake sturgeon spawning tributaries connecting to Lake Huron, and identifying and mitigating impediments to spawning success in the Saginaw River Watershed.

The primary impediments preventing lake sturgeon recovery in the Saginaw River Watershed are the limited number of lake sturgeon remaining in the watershed and blocked access to spawning substrates. These two impediments were highlighted in the presentation along with potential solutions to those problems. The presentation was well received by members of the group. The forum was an excellent opportunity for Boase to explain how the Alpena FRO is working with state and local governing bodies as well as private citizens in an effort to rehabilitate lake sturgeon populations throughout the Great lakes.

This presentation provided an excellent opportunity to explain to the public the Service's mission and efforts to restore native fish within the Great Lakes. Specifically, the presentation focused on efforts to rehabilitate lake sturgeon populations in tributaries connecting to Lake Huron. The benefits of native species restoration, and the detriments of exotic species were clearly defined and explained. This project is consistent with the "Partnerships and Accountability", "Aquatic Species Conservation and Management", and "Leadership in Science and Technology" focus areas of the Fisheries Program Vision for the Future.



#### Service Reads Lake Trout CWTs for CORA and MDNR



Submitted by Adam Kowalski Fish and Wildlife Biologist

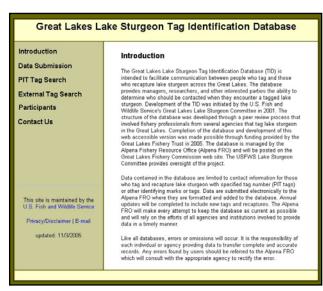
During the month of December 2005, Fishery Biologist Adam Kowalski extracted and read 300 coded-wire-tags (CWTs) from lake trout collected from the Chippewa Ottawa Resource Authority (CORA) and sport fishers. CWTs are microscopic metal tags placed in the snouts of juvenile lake trout at the hatchery.

When extracted the tag number, when compared to stocking records, yields information such as stocking location, stocking date, fish age, fish strain, and hatchery of origin. CORA collected lake trout heads during its spring fishery independent lake whitefish survey and fall lake trout assessments. Sport-fishery caught lake trout heads are collected by Michigan DNR head hunters and creel clerks at boat launches around throughout Michigan.

This concludes CWT extraction for the 2005 field season. All CWTs extracted and read at the Alpena FRO will be entered in the Lake Huron Technical Committee common CWT database, which is shared among all contributing resource agencies.

Data collected from lake trout CWTs are used to determine harvest limits, stocking locations, movement patterns, and post stocking survival rates of various hatchery practices. These outcomes are consistent with the Service's goal of building and maintaining self-sustaining populations of native fish species while providing recreational fishing opportunities and meeting the needs of tribal communities under the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

## Service Gives Talk on Sturgeon Tag Identification Database



Submitted by Adam Kowalski Fish and Wildlife Biologist

On December 20, 2005, Fishery Biologist Adam Kowalski gave a presentation at the Michigan DNR lake sturgeon committee meeting about the newly constructed Great Lakes wide lake sturgeon tagging database. Kowalski explained that a grant for \$11,000 was received from the Great Lakes Fishery Trust in 2004 to construct and maintain a database to house tag information such as tag type, tag number, tag location, and tagger contact information in 2004. Kowalski also updated the group on the current status of the database which contains over 10,000 PIT tags

and over 100 external tag sequences and emphasized the need for everyone to send their data to him to be entered into the database for improved data sharing among lake sturgeon researchers.



Kowalski also told the group that the database is housed at the Great Lakes Fishery Commissions web site and can be viewed at the following web address <a href="http://www.glfc.org/sturgeontag/index.htm">http://www.glfc.org/sturgeontag/index.htm</a>.

This database will improve the information sharing process between agencies and the general public who may encounter tagged lake sturgeon. The multi-partner nature of this work is consistent with the Service's goal of establishing and maintaining open, interactive communication with its partner agencies under the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future.

#### Alpena FRO provides Technical Assistance to USGS

Submitted by Scott Koproski Fishery Biologist

During the month of December 2005, Fishery Biologist Scott Koproski was contacted by Chuck Madenjian of the USGS Great Lakes Science Center to assist with ageing burbot otoliths from lakes Michigan and Huron. Madenjian has been collecting burbot otoliths for four years to identify growth characteristics of Great Lakes burbot populations. Biologist Koproski has extensive experience ageing otoliths, and Madenjian provided samples to Koproski for analysis. Koproski used the crack and burn technique to identify annuli formation within 70 pairs of otoliths. This marks the fifth consecutive year that Koproski has been assisting USGS with burbot otolith analysis. Written results of this work should be available in the winter upon completion of data analysis.

This is another example of Alpena FRO's commitment to the following Fisheries Program Vision for the Future priorities for "Partnerships and Accountability" and "Aquatic Species Conservation and Management".

#### Lake Huron Technical Committee Prepares for the State of Lake Huron Conference

Submitted by Jerry McClain Fishery Biologist

On January 17-19, 2006, the Lake Huron Technical Committee (LHTC) met in Port Huron, MI for its annual winter meeting. Although a number of agenda items addressed charges before the LHTC, the primary focus of this winter's meeting was to prepare for the upcoming State of Lake Huron Conference to be held in Windsor, Ontario in March 2006. Each of the Great Lakes provides an update on the "State of the Lake" on a five-year rotational basis at the annual Lake Committee meetings. In 2006, the focus will be on Lake Huron. During the January meeting LHTC members and resource persons provided draft oral presentations on their assigned segment of the Lake Huron fish community and received comments and suggestions for changes to be considered for the March conference.

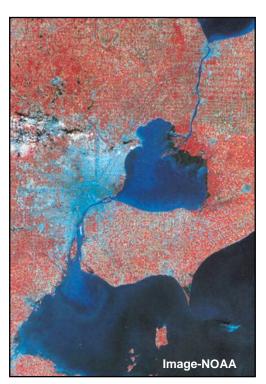
Alpena FRO Project Leader McClain (Aquatic Invasive Species), Treaty Fisheries Unit Coordinator Woldt (Lake Trout) and Fishery Biologist Boase (Lake Sturgeon) each provided an



oral presentation on their respective assignments. McClain, Woldt and Boase also serve as the lead author for sections of the written *State of Lake Huron in 2004* report which is expected to be delivered to the Great Lakes Fishery Commission (GLFC) for publication in its Special Publication series. The draft of the report is to be delivered to the GLFC in November 2006.

Participation as active members or resource persons of the Lake Huron Technical Committee (LHTC) is important for maintaining partnerships and collaboration for effective management of the Lake Huron fishery resources. This effort is consistent with and supportive of the "Partnerships and Accountability", and "Aquatic Species Conservation and Management" priorities of the Service Fisheries Program Vision for the Future.

#### **Huron-Erie Corridor Steering Committee Meets**



Submitted by Jerry McClain Fishery Biologist

On February 1, 2006, Project Leader McClain and Biologist Jim Boase participated in a meeting of the Huron-Erie Corridor Initiative (HECI) Steering Committee in Ann Arbor. The HECI was initially proposed in 2005 by the U.S. Geological Survey-Great Lakes Science Center (GLSC) to initiate and expand collaboration and develop a partnership effort to help prioritize research activities in this important Great Lakes waterway.

The Huron-Erie Corridor (HEC) includes the southern main basin of Lake Huron, the St. Clair River, Lake St. Clair and the western basin of Lake Erie. Currently there are roughly 40 species of fish that utilize the HEC for some part of their life cycle. Historically, the HEC provided critical spawning and nursery habitat for numerous native fish species, many of which are now in a significantly depleted state.

As development occurred along the HEC, habitat alteration resulted in the loss of much of this important habitat and the hydraulic characteristics of the system have been greatly altered. It is felt that much of the spawning habitat for native species such as lake sturgeon and lake whitefish have been lost to dredging and channelization for the movement of commercial shipping through the HEC. In addition, much of the nursery habitat that existed within the channel and at the mouth of the Detroit River is no longer available to larval fish as they drift out of the system.

A Steering Committee was established to help guide efforts to identify priority habitat restoration and fishery research needs in the HEC. Currently there are nearly 20 members to the Steering Committee representing federal, state, provincial, tribal and local governments, as well as university and other non-governmental organizations (NGOs). McClain represents the Service's Fisheries Program on the Steering Committee and Boase serves as the alternate. The Alpena FRO participates in numerous fishery research and management projects within the HEC in

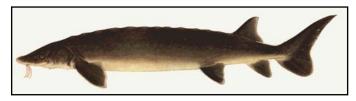


partnership with the GLSC and the Michigan Department of Natural Resources and Boase has a lead role for several lake sturgeon restoration projects in the waterway.

Due to the importance of the HEC to the fisheries in the region, the extensive habitat concerns and issues associated with the system, and the large partnership that continues to grow in the region, McClain has proposed the HECI as a candidate for the National Fish Habitat Initiative (NFHI). McClain provided a Power Point presentation to the Steering Committee and other participants at the February meeting to explain the history and purpose of the NFHI and to propose the HECI as a candidate for funding consideration in FY 2007 and beyond. There was unanimous support for the proposal and McClain will be working with Sandra Morrison of the GLSC to develop a draft proposal for Steering Committee review.

A partnership effort to address fishery habitat issues on a geographic scale is consistent with the core principals of the National Fish Habitat Initiative and is essential for effective protection, enhancement and restoration of native species. A large and growing partnership effort to guide restoration and management efforts in the Huron-Erie Corridor could lead to recovery of several depleted and listed finfish and shell fish populations in this critically important watershed. Service participation in this partnership effort and membership on the Steering Committee is consistent and supportive of the "Partnerships and Accountability", "Aquatic Species Conservation and Management" and "Aquatic Habitat Conservation and Management" priorities of the Service Fisheries Program Vision for the Future.

#### **Lake Sturgeon Coordination Meeting**



Submitted by Scott Koproski Fishery Biologist

On February 23, 2006, Fishery Biologist Scott Koproski traveled to Sault St. Marie,

MI, to meet with partners, cooperators, and interview candidates for a Student Temporary Experience Program (STEP) position for the lake sturgeon work scheduled to take place on the St. Marys River during the 2006 field season. Fishery Biologist Koproski was awarded a grant from the National Fish and Wildlife Foundation (NFWF) to assess lake sturgeon in the St. Marys River. The St. Marys River is the connecting waterway between Lake Superior and the Lower Great Lakes. The project includes partnerships with Lake Superior State University, Bay Mills Indian Community, the Soo Area Sportsmen, and eight volunteers all of which have donated their time and a vessel to this project.

Funding awarded from the NFWF will be used to capture and implant sonic telemetry tags in lake sturgeon utilizing the St. Marys River. Anecdotal information indicates that lake sturgeon were commonly encountered in the St. Marys River. However, very little is currently known about population size, available habitat, and spawning locations within this system. By capturing and following these fish we may be able to provide more definitive answers for researchers and managers. Without the help of the partners, volunteers, and the NFWF this project would not be possible.



This work is an example of Alpena FRO's commitment to the Service Fisheries Program Vision for the Future priorities of "Aquatic Species Conservation and Management", "Partnerships and Accountability", and "Cooperation with Native Americans".

#### **Lake Sturgeon Survey Begins on the Maumee River**



Submitted by James Boase Fishery Biologist

Fishery Biologist James Boase joined forces with Biologists Jim McFee and Chris Vandergoot from Ohio Department of Natural Resources - Division of Wildlife to conduct a lake sturgeon survey of the Maumee River. The Maumee River is a tributary to western Lake Erie and supports Ohio's largest spawning run of walleye. For many years recreational fishers targeting walleye on the Maumee have occasionally caught lake sturgeon below Providence Dam and Grand Rapids Dam. Preliminary genetic

information collected from lake sturgeon captured by commercial fishers near the mouth of the Maumee River suggests that there may exist a distinct population of lake sturgeon in western Lake Erie. This project was funded by the National Fish and Wildlife Foundation with the primary objective of determining if lake sturgeon are spawning in the Maumee watershed and where. Following the spring spawning survey we will begin sampling habitat parameters to determine if the system could support juvenile lake sturgeon. This effort, if successful, would be a major step for the rehabilitation of lake sturgeon in western Lake Erie.

This effort provided an opportunity to enhance our partnership with the Ohio Department of Natural Resources-Division of Wildlife to achieve common Great Lakes management objectives. Maintaining these collaborative relationships allows for the most efficient use of limited human and fiscal resources. This project is consistent with the "Partnerships and Accountability", "Aquatic Species Conservation and Management", and "Leadership in Science and Technology" focus areas of the Fisheries Program Vision for the Future.

## Alpena FRO Helps University of Wisconsin Graduate Student

Submitted by Adam Kowalski Fish and Wildlife Biologist

During the month of March 2006, Fishery Biologist Adam Kowalski was contacted by Heidi Keuler a graduate student at University of Wisconsin La Crosse working at the La Crosse FRO to assist in aging lake sturgeon fin rays for her graduate project. Keuler has been comparing age



and growth between lake sturgeon in Legend Lake and Lake Winnebago. Keuler supplied images of cross sectioned fin rays to Kowalski for aging. These ages would be compared with others providing similar analysis for accuracy. Kowalski examined approximately 130 samples from Lake Winnebago and 150 samples from Legend Lake. Summary of this comparative analysis will be available through Kueler upon completion of the project.

This work is consistent with Service Fisheries Program Vision for the Future "Partnerships and Accountability" priority and enhances open, interactive communication between the Fisheries Program and its Partners.

## **ANS Tissue Samples Transferred to the University of Toledo for Genetics Studies**



Submitted by Anjanette Bowen Fishery Biologist

Alpena FRO Fishery Biologist Bowen provided the University of Toledo - Lake Erie Center with Aquatic Nuisance Species (ANS) tissue samples from Eurasian ruffe (ruffe) and zebra mussels in March 2006.

Ruffe were collected from 1998 to 2002 from the Thunder Bay River, Lake Huron during spring efforts to remove spawning adults and fall efforts to assess the young-of-the-year

ruffe population. Ruffe were frozen following collection. Tissue samples were harvested in 2005 and placed in ethanol. Samples consisted of pectoral fin tissue. Zebra mussels were collected in the fall of 2005 from the Thunder Bay River and were preserved whole in ethanol for genetics studies. The ANS samples will be used to gather information on the genetic origin of invasives within the Great Lakes.

Tissue samples were also collected from the native yellow perch spawning population in Thunder Bay in the spring of 2005. These samples will be used to examine wild spawning populations of native species from areas around the Great Lakes.

Samples were sent via Fed Ex to the University on March 22. In 2006, round gobies and zebra mussels will be collected from a number of ports and rivers in U.S. waters of Lake Huron and the St. Marys River during regular fall ANS surveillance, and provided to the university for analysis.

This effort supports and is consistent with the Service Fisheries Program Vision for the Future priorities for "Partnerships and Accountability" and "Aquatic Species Conservation and Management".



### Alpena FRO and Michigan DNR Coordinate Prey Fish Collections for Lake Huron Study of Predator Response to Prey Abundance

Submitted by Anjanette Bowen Fishery Biologist

The U.S. Fish and Wildlife Service Alpena FRO is assisting the Michigan DNR with a study funded by the Great Lakes Fishery Commission to examine the responses of lake trout and chinook salmon to unprecedented declines in major prey fish abundance in Lake Huron. Alpena FRO is collecting prey samples for the study in the fall during scheduled ANS surveillance activities at ports and rivers in US waters of Lake Huron. On March 28, 2006, Alpena FRO Biologist Bowen met with Michigan DNR Biologist Ji He of the Alpena Great Lakes Fishery Station to transfer prey samples collected in 2005 and coordinate 2006 sample collection.

In 2005, samples of round goby were collected from Port Dolomite, Cheboygan River, and Thunder Bay in September. These samples were transferred to the DNR for processing and analysis. In 2006, up to 50 samples of all species captured will be needed from each Lake Huron location sampled. Whole fish will be separated by species and frozen.

The principal investigators and coordinators for this study are James Bence of Michigan State University and Ji He and James Johnson of the Michigan DNR Alpena Great Lakes Fishery Station. Partners include the USGS Great Lakes Sciences Center, Ontario Ministry of Natural Resources, Chippewa/Ottawa Resource Authority, and U.S. Fish and Wildlife Service. The study was initiated in October 2005 and will continue into the fall of 2008.

This effort is consistent with the Service Fisheries Program Vision for the Future priorities for "Partnerships and Accountability" and "Aquatic Species Conservation and Management".

# Alpena FRO Assists in Retrieving a Lake Sturgeon from a Trap Net



Submitted by Adam Kowalski Fish and Wildlife Biologist

On April 19, 2006, Fishery Biologist Adam Kowalski was contacted by Warren Beers, a state licensed commercial fisher on Saginaw Bay seeking assistance in recovering a lake sturgeon from a commercial trap net. Kowalski traveled to Saginaw Bay and assisted in removing the sturgeon from the net and recording biological data on the fish.

The sturgeon had been previously tagged by both the Wisconsin Department of Natural



Resources (Lake Winnebago) and Michigan Department of Natural Resources (Marquette Station). Kowalski recorded the tag numbers and contacted both agencies to provide the updated data. Warren Beers is one of several commercial fishers that assist Alpena FRO in collecting data from lake sturgeon caught as by-catch during their normal fishing seasons.

This work is consistent with the "Partnerships and Accountability" priority of the Service Fisheries Program Vision for the Future and enhances open, interactive communication between the Fisheries Program and its Partners.

#### St. Marys River Fishery Task Group Meeting

Submitted by Anjanette Bowen Fishery Biologist

The St. Marys River Fishery Task Group (SMRFTG) met on May 4, 2006 to coordinate and discuss upcoming activities and issues of concern regarding St. Marys River fisheries. Alpena FRO Fishery Biologist Bowen chaired the meeting which was held at CORA in Sault Ste. Marie, Michigan. The group coordinated activities for the upcoming 2006 St. Marys River Fish Community Survey which is scheduled for August and the annual Fall Walleye Recruitment Survey which is scheduled for September. Dave Fielder (Michigan DNR) presented a summary of the 2005 St. Marys River Harvest Survey and Bill Gardner (DFO) presented results of their 2005 Fall Index Netting Survey. Michelle Selzer (Michigan DEQ) provided information on the St. Marys River RAP Beneficial Use Impairments (BUI) related to fisheries. She mentioned that BUI delisting criteria will be developed and that fishery data will be needed to determine whether the delisting criteria have been met. The next task group meeting is scheduled to be held November 2.

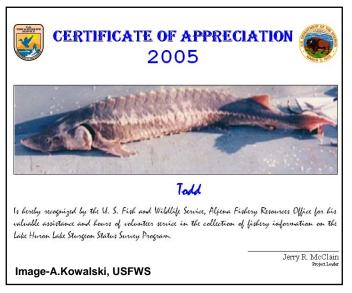
The SMRFTG is comprised of a number of agencies with management authority or other interests in the St. Marys River. Membership includes the Michigan DNR, Ontario MNR, Bay Mills Indian Community, Chippewa Ottawa Resource Authority, DFO Canada, Lake Superior State University, Sault College of Applied Arts, and the Service.

The task group was established under the authority of the Great Lakes Fishery Commission's Lake Huron Committee in 1997 to achieve a meaningful understanding and a joint strategy for enhancing and maximizing the fishery resources of the St. Marys River. Publications produced on the St. Marys River fishery by the Task Group may be found on the Great Lakes Fishery Commission's website at <a href="http://www.glfc.org/lakecom/lhc/lhchome.php">http://www.glfc.org/lakecom/lhc/lhchome.php</a> under 'Publications and Products'.

St. Marys River Fishery Task Group efforts fulfill a multi-agency partnership approach to fishery conservation and management on the St. Marys River. These activities support the Service Fisheries Program Vision for the Future priorities for "Partnerships and Accountability" and "Aquatic Species Conservation and Management".



#### **Commercial Fishers Appreciation Dinner**



Submitted by Adam Kowalski Fish and Wildlife Biologist

During May 2006, Fishery Biologist Adam Kowalski started preparing for the 9th Annual Commercial Fishers Appreciation Dinner. The Alpena FRO annually hosts this dinner for Michigan state-licensed and tribal commercial fishers that assist us with a lake sturgeon tagging project in Lake Huron. Kowalski reserved a pavilion at a city park in Bay City to hold the dinner and made other arrangements for the event. A number of prizes and gifts such as life vests, rain gear, t-shirts, and can coolers are

purchased for the event to show our appreciation. All costs for the event are paid for with volunteer funds.

Commercial fishers encounter lake sturgeon as by-catch during normal fishing operations for lake whitefish, yellow perch, and channel catfish. The fishers volunteer time by tagging and collecting biological information on lake sturgeon by-catch. Currently, 10 commercial fishers operating 16 boats participate in the study. Approximately 430 lake sturgeon have been tagged since the program began in 1995.

This partnership between the Service and Lake Huron commercial fishers to track and monitor lake sturgeon has been in place since 1995, and is consistent with the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future to develop and improve long-term partnerships.

## Whitefish Research in the Huron Erie Corridor Highlighted in the Toledo Blade

Submitted by James Boase Fishery Biologist

Fisheries scientists from Alpena FRO and the USGS Great Lakes Science Center discovered the presence of spawning whitefish in the Detroit River last winter for the first time since 1916. News of the discovery was first announced in the Toledo Blade on May 23, 2006 and can be found on their website at

http://www.toledoblade.com/apps/pbcs.dll/article?AID=/20060523/COLUMNIST22/605230319 &SearchID=73250341699796. The work conducted last fall was part of the preliminary research for a larger study that is scheduled to begin in the fall of 2006 and continue until the spring of 2008. Funding for the research is provided, in part, by the Service's Science Support Program





(SSP). The goal of the project is to identify fish use of recently created and historical spawning habitats in the Detroit River. During the spring, species specifically targeted will include lake sturgeon and walleye, while whitefish will be the species of interest in the fall and winter.

Whitefish are currently the most sought after commercial species in the Great Lakes and at one time they were harvested in huge numbers in Lake Erie. The fishery collapsed for a number of reasons but spawning habitat loss and pollution were

identified as primary reasons for the decline. At the turn of the century the Detroit River supported huge numbers of spawning whitefish because at that time the river was composed of many braided, shallow channels. Those historical channels were composed primarily of limestone bedrock, rock and gravel, habitats that are needed for successful spawning by not only whitefish but also many other species of native fish like lake sturgeon and walleye. In 1972 the U.S. Clean Water Act and the U.S.- Canada Great Lakes Water Quality Agreement in 1972 were signed and since then the Detroit River has seen a steady decline in pollution related problems. Ultimately the goal is to clean up the river and provide adequate habitat that will eventually lead to the re-establishment of species like whitefish and lake sturgeon.

This effort provided an opportunity to enhance our partnership with the U.S. Geological Survey - Great Lakes Science Center and the Michigan Department of Natural Resources to achieve common Great Lakes management objectives. Maintaining these collaborative relationships allows for the most efficient use of limited human and fiscal resources. This project is consistent with the "Partnerships and Accountability", "Aquatic Species Conservation and Management", and "Leadership in Science and Technology" focus areas of the Fisheries Program Vision for the Future.

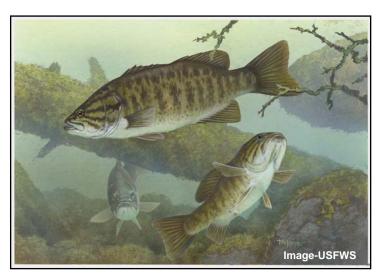
#### **Alpena FRO Collects Smallmouth Bass in Thunder Bay**

Submitted by Adam Kowalski Fishery Biologist

For two nights Fishery Biologists Adam Kowalski, Anjanette Bowen and Jerry McClain participated in a joint project with Michigan Department of Natural Resources (MDNR) to collect data on Thunder Bay smallmouth bass. The survey was established to provide baseline information on Thunder Bay smallmouth bass for use in evaluating cormorant control efforts being conducted by USDA-APHIS. This information was also needed as part of a larger program to better understand the status of smallmouth bass stocks in Lake Huron, a need identified by the Lake Huron Technical Committee.

Nighttime electrofishing was used to collect fish on June 13 and 14, 2006. This effort coincided with MDNR nearshore small-mesh gillnetting that has been used for several years to monitor





predator-prey dynamics in Thunder Bay. In total, 33 smallmouth bass were collected in 7 hours of electrofishing. Two areas of the bay were sampled where smallmouth bass habitat was considered ideal. The shoal areas around Partridge Point and Sulphur Island, on the south side of the bay, was sampled the first night and produced 25 of the 33 smallmouth. The rocky shoreline and nearshore reefs on the north side of the bay was sampled the second night and produce the additional 8 fish.

In addition to general biological data, tissue samples were also taken from these fish and provided to the LaCrosse Fish Health Center to conduct bacterial and viral screening. The primary focus was screening for viral hemorrhagic septicemia (VHS) in Lake Huron. Fin tissue was also taken from the bass by Cal Borden, a graduate student from Ohio who is compiling genetic information on Great Lakes smallmouth bass stocks. Carp were also collected during the second night of sampling at the request of MDNR for annual contaminant monitoring conducted by Michigan Department of Environmental Quality.

This work is consistent with the Fisheries Program Vision for the Future priority of "Partnerships and Accountability" in an effort to develop long term partnerships with States, Tribes, other federal agencies and to develop collaborative conservation strategies for aquatic resources.

### USFWS Participates in Invasive Species Field Course Hosted by Inland Seas Education Association



Submitted by Anjanette Bowen Fishery Biologist

On June 20, 2006, Barry Matthews (Ludington Biological Station) and Anjanette Bowen (Alpena Fishery Resources Office) with the U.S. Fish and Wildlife Service (USFWS) were invited to participate in an Invasive Species Field Course hosted by Inland Seas Education Association (ISEA) and held at the Great Lakes Campus of Northwestern Michigan College in Traverse City, MI. The course educates teachers from across the Great Lakes Region about invasive species issues and allows them the ability to directly interact with invasive species

researchers from a number of management agencies.



Barry Matthews provided a video with information on sea lamprey in the Great Lakes - showing the history behind their invasion, life cycle characteristics, and current methods of control. Bowen provided a PowerPoint presentation with information on problems associated with ruffe and goby, identifying characteristics, and their current distribution. Preserved invasive specimens, similar looking native species, and identification cards were provided to aid in proper identification.

Other management agencies that participated in the course included Michigan Sea Grant, NOAA-GLERL, MDEQ, U of M, and DTE Energy. A number of teachers presented information as well. Over 30 teachers attended the course which was held from June 19-21.

ISEA is a non-profit organization whose mission is to provide a floating classroom where people of all ages can gain first-hand training and experience in the Great Lakes ecosystem.

Partnerships and public education are important tools to combat and prevent the spread of invasive species and help to promote healthy native species populations. This effort is consistent with the Fisheries Program Vision for the Future priorities of "Partnerships and Accountability", "Public Use" and "Aquatic Species Conservation and Management".

## **Aquatic Invasive Species Early Detection Workshop Hosted by Tip of the Mitt Watershed Council**



Submitted by Anjanette Bowen Fishery Biologist

Biologist Bowen provided information on the invasive round goby for two Workshops hosted by the Tip of the Mitt Watershed Council on "Aquatic Invasive Species Early Detection". The workshops were held on June 21, 2006 in Petoskey, MI and June 22, 2006 in Central Lake, MI. They provided information to concerned lake citizens willing to train others about a number of aquatic

invasive species including purple loosestrife, Eurasian watermilfoil, round goby, and others. Participants learned how invasive species harm the aquatic environment, how to distinguish invasives from native species, and how best to combat, control, or take action against their populations.

The Tip of the Mitt Watershed Council is a non-profit organization dedicated to the protection of northern Michigan lakes, streams, wetlands, and ground water through advocacy, education, water quality monitoring, and research.

Partnerships and public education are important tools to combat and prevent the spread of invasive species and help to promote healthy native species populations. This effort is consistent



with the Fisheries Program Vision for the Future priorities of "Partnerships and Accountability", "Public Use" and "Aquatic Species Conservation and Management".

### **Near Shore Fish Study Continues in the Detroit River International Wildlife Refuge**

Submitted by James Boase Fishery Biologist

As part of the Service's Challenge Cost Share Grant Program (CCS) biologists from Alpena FRO, Detroit River International Wildlife Refuge (Refuge), Michigan DNR Lake Erie Management Unit, Michigan DNR Lake St. Clair Research Station, and USGS Great Lakes Science Center teamed up to conduct the second fishery survey within the recently established Refuge. The Refuge boundary includes Michigan waters of the Lower Detroit River and Lake Erie. The last time a similar fishery survey was conducted in that area of the Great Lakes was back in the early 1980's. Since that time many changes have taken place, specifically the addition of exotic species that have likely displaced or reduced the numbers and diversity of native species.

The first part of the survey took place last year in September with efforts focusing on wetland areas located along western Lake Erie. The second part of the survey was conducted this year to identify wetland areas being used as nursery areas during the month of July. Our primary goal with this project was to provide baseline information about what species, both native and exotic, are using the remaining wetland complexes found within Refuge waters in the lower Detroit River.

The Refuge provides some of the last remaining natural wetland areas available in the Detroit River and Western Lake Erie. Refuge Manager John Hartig and DNR Biologist Joe Robison continue to meet with landowners within the Refuge Boundaries seeking management agreements to protect the remaining wetlands. Those nursery areas are critical to the early life stages of many species of sport fish as well as some state listed species. Historical records from past surveys have identified over thirty species of fish using those wetland habitats for either spawning or nursery areas.

At a planning meeting in March 2006 researchers and managers met to identify locations in the lower Detroit River that were considered important nursery habitat and to identify the dates to sample. During the September 2005 survey along western Lake Erie (using both electro-fishing and seining) 46 different fish species were collected. We were able to demonstrate that some state listed species as well as many economically valuable sport fish species (walleye, largemouth bass, smallmouth bass, northern pike, and other sunfishes) were using those locations as nursery areas. In 2006 sampling took place in July, earlier in the season with the rational that many of the species spawn early in the spring and would still be residing in the nursery areas. With the exception of one location in western Lake Erie all sampling took place in the lower Detroit River.

Small mesh fyke nets were used in 2006 in addition to electro-fishing and seining gear. Sampling consisted of 14 seine hauls, electro-fishing at 24 locations, and 29 fyke net sets. We



caught a total of 11,814 fish representing 55 species from 15 families. Two species, the silver lamprey and the state listed silver chub, were collected last year but not found this year. Ten new species were captured this year that were not represented in last year's catch including alewife, muskellunge, rainbow trout, striped shiner, horneyhead chub, black buffalo, smallmouth buffalo, silver redhorse, northern hog sucker, and white crappie. Again this year a number of economically important species of sportfish were using the limited number of wetland areas as nursery grounds. This effort is a critical first step in identifying the current status of fish species within the newly created Detroit River International Wildlife Refuge and will aid the refuge with establishing its Comprehensive Conservation Plan.

This effort provided a unique opportunity to create new partnerships with both governmental and non-governmental agencies to achieve common Great Lakes management objectives. Maintaining these collaborative relationships allows for the most efficient use of limited human and fiscal resources. This project is consistent with the "Partnerships and Accountability", "Aquatic Species Conservation and Management", and "Leadership in Science and Technology" focus areas of the Fisheries Program Vision for the Future.

#### Alpena FRO Participates in Institutes for Journalism and Natural Resources Event

Submitted by Jerry McClain Fishery Biologist

Project Leader McClain participated in the annual Institutes for Journalism and Natural Resources event day on July 23, 2006 in Alpena. This annual event brings journalists from around the U.S. and Canada to tour locations in the Great Lakes where a variety of natural resource issues can be discussed and, in some cases, viewed first hand. The intent of the event is to stimulate interest by practicing journalists to do stories on regional natural resource issues. This year's event focused on issues in northern lower Michigan with primary focus on Lake Huron. Participants in the event included print journalists from Michigan and other Great Lakes states, some western states, and Canadian provinces of Ontario and Quebec. In addition, a radio journalist from Michigan Public Radio also participated. The panel discussion that McClain participated in dealt with the changing food web in Lake Huron and terms and implementation of the 2000 Consent Decree. Other stops on the tour included the Hammond Bay Biological Station and the Kirtland Warbler management areas near Grayling.

Participation in outreach events such as this enables the Service to educate the public on our roles and responsibilities as the principal federal agency for conserving, protecting and enhancing fish, wildlife and plants and their habitats for the continuing benefit of the American people. In addition, the event increases the visibility of the Alpena FRO for fishery management assistance activities in this region of the Great Lakes. This activity is consistent with and supportive of the "Partnerships and Accountability" and "Public Use" priorities of the Service Fisheries Program Vision for the Future.



### **Alpena FRO Completes Preparation for the Commercial Fishers Appreciation Dinner**

Submitted by Adam Kowalski Fishery Biologist

During July 2006, Fishery Biologist Adam Kowalski finalized details for the 9th Annual Commercial Fishers Appreciation Dinner. The Alpena FRO annually hosts this dinner for Michigan state-licensed and tribal commercial fishers that assist us with a lake sturgeon tagging project in Lake Huron. Kowalski reserved a pavilion at a city park in Bay City to hold the dinner and made other arrangements for the event. A number of prizes and gifts such as life vests, rain gear, t-shirts, and can coolers are purchased for the event to show our appreciation. All costs for the event are paid for with volunteer funds.

Commercial fishers encounter lake sturgeon as by-catch during normal fishing operations for lake whitefish, yellow perch, and channel catfish. The fishers volunteer time by tagging and collecting biological information on lake sturgeon by-catch. Currently, 10 commercial fishers operating 16 boats participate in the study. Approximately 430 lake sturgeon have been tagged since the program began in 1995.

This partnership between the Service and Lake Huron commercial fishers to track and monitor lake sturgeon has been in place since 1995, and is consistent with the "Partnerships and Accountability" priority of the Fisheries Program Vision for the Future to develop and improve long-term partnerships.

## Congressman John D. Dingell Hosts News Conference to Announce New Funding for Humbug Marsh



Submitted by James Boase Fishery Biologist

On Monday, August 14, 2006 Congressman John D. Dingell (MI-15) hosted a news conference to announce new funding for Humbug Marsh trails and a bird driving tour. Announcement of the funding took place at the Gibraltar Community Center.

Humbug Marsh is composed of a mix of approximately 300 acres of

forested uplands and over 100 acres of wetlands located on the Detroit River and the hope is that once the trails are constructed and improvements are complete the area will be a major tourist destination not just for locals but for other as well. Humbug Marsh stretches for almost a mile



and is considered one of the last undisturbed wetlands located on the U.S. side of the river. The marsh is located in the heart of the Detroit River International Wildlife Refuge and is considered one of the richest areas of biodiversity along the river. It provides critical habitat for many species of fish, ducks, migratory birds, mammals and other animals, as well as many valued plant species. The property is adjacent to a recently acquired 44 acre site that will become the headquarters for the Detroit River International Wildlife Refuge, which will house the offices of the U. S. Fish and Wildlife Service. Last year approximately 15,000 people visited the marsh and by 2008, when the visitor center is expected to be complete and the trails will have been constructed, the hope is that the marsh will receive over half a million visitors each year.

Approximately 50 individuals representing local governments, corporations, interest groups, citizens and the local media were present at the Center. Refuge Manager John Hartig introduced Congressman Dingell, Janae' Reneaud and James Boase from the Service were also in attendance. Announcement of the event was highlighted in The Detroit News and can be accessed at the following web link:

http://www.detnews.com/apps/pbcs.dll/article?AID=/20060814/METRO01/608140337/1006

This open house provided an excellent opportunity to interact with federal, state and local governing officials along with interest groups working in southern Michigan. This meeting at the Center provided the opportunity to explain the Service's mission and efforts to manage resources in the Great Lakes. This outreach event supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

## St. Marys River Fishery Task Group Conducts Fish Community Assessment of the St. Marys River

Submitted by Anjanette Bowen Fishery Biologist

The St. Marys River Fishery Task Group (SMRFTG) conducted a coordinated survey of the St. Marys River using variable mesh gillnets during the month of August. A total of 45 sites from the upper river to Potagannissing Bay were sampled. Information was collected on the diversity and relative abundance of all species and on the age, diet, lamprey wounding, and maturity of sport species. The survey was conducted as a partnership of SMRFTG member agencies and resource partners including the Michigan Department of Natural Resources (MDNR), Ontario Ministry of Natural Resources, Department of Fisheries and Oceans Canada, Chippewa Ottawa Resource Authority (CORA), Bay Mills Indian Community, Lake Superior State University (LSSU), and U.S. Fish and Wildlife Service (Alpena FRO).

Alpena FRO and LSSU partnered as a survey crew and conducted assessment at 6 sites in Lake Nicolet and the Munuscong Channel during the week of August 28, 2006. Biologists Adam Kowalski and Scott Koproski coordinated preparation for the USFWS/LSSU assessment. The survey crew consisted of LSSU students Jennifer Johnson, Jason Lorenz, and Chris Wesolek and Alpena FRO Biologists Kowalski and Bowen and Biological Science Aid Kline. We are grateful



for assistance that was provided by Mark Ebener and ITFAP staff and Roger Greil of the LSSU Aquatic Research Lab.

The St. Marys River fishery assessment was initiated by the MDNR in 1975 and has been conducted approximately every 5 years. In 2002 the SMRFTG agreed to assist with the survey. Information from the 2002 survey is available on-line titled "Population Dynamics of the St. Marys River Fish Community 1975-2002" at the Great Lakes Fishery Commission's website <a href="http://www.glfc.org/lakecom/lhc/SMR2002rpt.pdf">http://www.glfc.org/lakecom/lhc/SMR2002rpt.pdf</a>).

This survey effort is consistent with the Service Fisheries Program Vision for the Future priorities of "Partnerships and Accountability" and "Aquatic Species Conservation and Management".

#### **DTE Energy Hosts Dinner Party at Purdy Fisheries**



Submitted James Boase Fishery Biologist

Lake sturgeon research was highlighted at a dinner party sponsored by DTE Energy and hosted by Purdy Fisheries. The dinner was held on August 29, 2006 at Point Edward Ontario near the site of one of the largest lake sturgeon spawning grounds in the Great Lakes. Approximately 50 employees and their families from DTE Energy attended the dinner. Fishery Biologists James Boase from

Alpena FRO and Bruce Manny from USGS Great Lakes Science Center (GLSC) were guest speakers at the dinner.

The outdoor dining area is situated near the headwaters of the St. Clair River. The dinner menu consisted of fresh walleye and perch. The Purdy facility has multiple venues for viewing live lake sturgeon including a 15,000 gallon outdoor aquarium and two large concrete raceways. Following dinner Boase and Manny shuttled guests to the large fish raceways where many lake sturgeon of varying size were housed. For most of the guests the highlight of the evening was the opportunity to see and handle the live sturgeon that were located in the large raceways.

Alpena FRO, GLSC, Michigan DNR, and DTE Energy have collaborated on a number of studies including telemetry projects in Lake St. Clair, the Detroit River and southern Lake Huron which ultimately let to the discovery of the three known lake sturgeon spawning reefs located in the Huron Erie Corridor. In 2003, DTE Energy helped fund the construction of an artificial lake sturgeon spawning reef near Belle Isle in the Detroit River. This event at Purdy Fisheries provided an excellent opportunity for Alpena FRO to highlight the continued spirit of cooperation between the Service and its partners for lake sturgeon restoration in the Great Lakes.



This event provided an opportunity to interact with the public and to explain the Service's mission and efforts to protect and help manage Great Lakes natural resources. Specifically, information was provided about the efforts of the Service and its partners to rehabilitate native lake sturgeon populations in the Great Lakes and the role that the Fishery Resources Offices have in this endeavor. This research event supports the "Partnerships and Accountability" and "Aquatic Species Conservation and Management" priorities of the Fisheries Program Vision for the Future.

### Prey Fish Collections Made for Study of Salmon and Trout Response to Declining Prey Abundance in Lake Huron

Submitted Anjanette Bowen Fishery Biologist

During September and October 2006, Alpena FRO collected samples of prey fish for a Great Lakes Fishery Commission funded study to determine salmon and lake trout response to declining prey abundance in Lake Huron. Alpena FRO is an associated investigator for the study which is coordinated by Jim Bence of Michigan State University and Ji He and James Johnson of the Michigan DNR Alpena Fishery Research Station.

Prey were collected during annual fall trawling efforts to detect new populations of aquatic nuisance species. Samples were collected from 13 species at 9 ports from DeTour to Harbor Beach. Prey samples will be provided to Michigan State University where they will be combusted to determine their energy density and value to predators. The USGS and MDNR will also be collecting prey samples for this study.

We are grateful to District Fisheries Biologist Jim Baker with the Michigan DNR – Bay City Field Office who provided needed assistance during prey sample collections.

This effort is consistent with the Service Fisheries Program Vision for the Future priorities for "Partnerships and Accountability" and "Aquatic Species Conservation and Management".

The Alpena Fishery Resources Office (FRO) is located in Alpena, Michigan and works to meet U.S. Fish and Wildlife Service Fishery and Ecosystem goals within Lake Huron, Western Lake Erie, and connecting waters of the St. Marys River, St. Clair River, and Detroit River. Activities include Aquatic Species Conservation and Management, Aquatic Habitat Conservation and Management, Cooperation with Native Americans, Leadership in Science and Technology, Partnerships and Accountability, Public Use, and Workforce Management – all of which are conducted in alignment with the Service Fisheries Program Vision for the Future. The station is one of many field offices located within Region 3, the Great Lakes Big Rivers Region. For more information about Alpena FRO programs and activities visit our web site located at http://www.fws.gov/midwest/alpena/.

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